



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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AUG 08 2016

Ref: 8EPR-N

Mr. Scott Haight, Acting District Manager
Bureau of Land Management
Green River District Office
170 South 500 East
Vernal, Utah 84078

Re: Monument Butte Final EIS CEQ# 20160139

Dear Mr. Haight:

The U.S. Environmental Protection Agency Region 8 has reviewed the June 2016 Final Environmental Impact Statement (EIS) prepared by the Bureau of Land Management (BLM) for the Monument Butte Oil and Gas Development Project. Our comments are provided for your consideration pursuant to our responsibilities and authorities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA).

Project Background

Newfield Exploration Company (Newfield) proposes to expand their ongoing oil and natural gas development in the Monument Butte field using waterflood methods and deep gas operations. The proposal includes up to 5,750 new gas and oil wells, 750 of which would be converted into waterflood injection wells after approximately three years of production. The proposed action also includes 24 new or expanded compressor stations, construction of a centralized gas processing plant, construction or expansion of 11 water treatment and injection facilities, construction of up to 12 gas and oil separation plants, development of one fresh water collector well, and construction of six water pump stations.

In addition to the proposed action (Alternative A), the EIS analyzes the following alternatives:

- Alternative B, No Action: Development of 241 previously approved wells on BLM-administered lands and development of 547 wells on state and private lands or minerals in the project area, for a total of 788 oil and gas wells.
- Alternative C, Field Wide Electrification: Identical to the proposed action, with the addition of a phased field-wide electrification system that would be integrated into the project area over an estimated 7-year period.
- Alternative D, Resource Protection, BLM's Agency Preferred Alternative: Includes the same number of wells as the proposed action, but is designed to protect the relevant and important values of the Pariette Wetlands Area of Critical Environmental Concern (ACEC), to avoid or minimize impacts to riparian areas, floodplains, and threatened cactus species, and to minimize surface disturbance through the use of directional drilling.

All alternatives include ancillary facilities similar to the proposed action, scaled according to the anticipated development.

The EPA's Comments and Recommendations

Although still within the range of alternatives analyzed in the Draft EIS, the BLM's Preferred Alternative has changed notably in the Final EIS. The preferred alternative and associated mitigation commitments resolve the principal air quality and water quality concerns that the EPA raised in previous comments to BLM. This letter describes the improvements in this EIS and identifies several remaining concerns that could be addressed through the Record of Decision. The BLM has appropriately provided an extended review and comment period for the Final EIS, in order to allow the public time to understand the changes and their implications. The EPA also would like to acknowledge BLM's collaboration with us, as a Cooperating Agency, to improve the analysis and mitigation of air quality and water resource impacts in the revised Preferred Alternative.

1. Air Quality

Ozone levels in the Uinta Basin are a known and serious health concern. Even with very little drilling activity in the Basin this past winter, ozone levels are again exceeding the National Ambient Air Quality Standard (NAAQS) of 70 parts per billion (ppb) with 8-hour concentrations peaking at 120 ppb. The most recent non-regulatory three-year design value (2013-2015) for the area is 93 ppb at the Ouray monitor, and 8-hour ozone concentrations during a winter ozone event in 2013 reached values as high as 141 ppb at the Ouray monitor. This concentration corresponds to an Air Quality Index value of 238 and is categorized as "Very Unhealthy." Given the existing compromised condition of this airshed, any project-specific direct and indirect impacts to ozone levels in the Uinta Basin should be prevented. This Final EIS includes a mitigation strategy (key additions described in the next paragraph) designed to prevent ozone impacts from this project.

The EPA's Draft EIS comments emphasized the importance of obtaining results from photochemical modeling to understand the potential for this project to impact ozone in the Uinta Basin. Photochemical modeling was conducted between the Draft and Final EIS and predicts adverse impacts to ozone within the Uinta Basin, including a potentially significant contribution by the Monument Butte Project. To address the Monument Butte Project's potential ozone contribution, the BLM collaboratively developed additional mitigation measures to reduce ozone precursor emissions from the proposed project, and worked with Newfield to have those measures incorporated in the Final EIS as Applicant Committed Environmental Protection Measures (ACEPMs). Key additions in the Final EIS include: use of an annual emissions balance sheet to ensure that new stationary sources authorized by the Record of Decision (ROD) will not result in net increases of volatile organic compound (VOC) emissions; an enhanced monitoring program for leak detection and repair; and a commitment to develop an Ozone Action Mitigation Plan to be implemented during ozone episodes. Combined with the mitigation identified in the Draft EIS, this mitigation package provides reasonable assurance that the portion of the Monument Butte Project on Federal lands will not contribute to ozone exceedances or violations in the Basin.

2. Greenhouse Gas Emissions and Climate Change

While the Final EIS estimates the direct greenhouse gas (GHG) emissions caused by the proposed

project, it should also quantify indirect GHG emissions caused by the proposal and its alternatives, including emissions associated with the end use of the oil and gas due to the reasonably close causal relationship to the project and as provided in the Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (Guidance)¹ finalized by the Council on Environmental Quality (CEQ) on August 1, 2016. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website². These emissions levels can serve as a basis for comparison of the alternatives with respect to GHG impacts. For the Monument Butte Project, the EPA recommends that the ROD identify the mitigation measures that will reduce GHG emissions and disclose the estimated GHG reductions associated with such measures. Many of the measures included for reducing ozone precursor emissions will have co-benefits for GHG emissions.

The Final EIS inappropriately evaluates GHG emissions associated with the project by comparing them to state, U.S. and global emissions to conclude that the emissions are small. Such comparisons are “not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact” (Guidance, pg.11).

As the BLM proceeds with implementation of the selected alternative, the EPA recommends considering climate adaptation measures based on how future climate scenarios may impact the project. The National Climate Assessment (NCA), released by the U.S. Global Change Research Program³ contains scenarios for regions and sectors, including energy and transportation. We recommend that the BLM use NCA or other peer reviewed climate scenarios to inform implementation because this can improve resilience and preparedness for climate change. Changing climate conditions can affect a proposed project, as well as the project's ability to meet the purpose and need presented in the Final EIS. If impacts may be exacerbated by climate change, additional mitigation measures may be warranted. For example, remediation of disturbed sites may become more challenging if the project area becomes hotter and drier.

3. Protection of Surface Water Resources

The BLM has included valuable measures to protect surface water resources, going beyond those specified in the Vernal Resource Management Plan (RMP). In particular, there are notable protections added in this Final EIS for the Pariette Wetlands. These wetlands are a rare and valuable resource, and their protection is critical, as has been acknowledged by the BLM through establishment of the Pariette Wetlands ACEC. In addition to the important habitat values of the ACEC, Pariette Draw is on Utah's 2012 Clean Water Act Section 303(d) List and has a completed Total Maximum Daily Load (TMDL). The TMDL specifically calculates the reductions in total dissolved solids (TDS), boron, and selenium in the watershed that are necessary in order for surface water standards to be met. Disturbance of soils in the watershed may contribute to the existing water quality impairments of Pariette Draw. The EPA was

¹ *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*. August 1, 2016. https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf

² https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html

³ <http://nca2014.globalchange.gov/report>

therefore very supportive of the objective of “avoiding new surface disturbance within the Pariette Wetlands ACEC” included in the Draft EIS Preferred Alternative. This objective has been changed in the Final EIS to “protecting the relevant and important values of the Pariette Wetlands ACEC.” Although new surface disturbance and well pad expansions will now be allowed within the ACEC in order to allow the applicant to access its valid, existing mineral rights, limitations will be in place that restrict or prohibit well pad construction and other surface-disturbing activities within 500 feet of Pariette Creek or Pariette Ponds, within 100 meters of riparian areas, and within active floodplains and public water reserves. The mitigation measures provided in Section 2.6.1 of the Final EIS will minimize the mobilization of sediment (and associated constituents) and thereby substantially reduce the potential for an additional load of TDS, boron and selenium to Pariette Draw compared to historic development in the area.

Our understanding based on review of Chapter 4 of the Final EIS and the BLM’s response to the EPA’s comments is that the mitigation measures incorporated in the Resource Protection Alternative for protection of surface water resources apply throughout the project area. However, in the description of Alternative D in Chapter 2, the measures appear under the heading of Pariette Wetlands ACEC, which makes the extent of their applicability unclear. We recommend that the ROD clarify that the measures apply throughout the project area to ensure protection of water quality and riparian habitat.

4. Applicant Committed Environmental Protection Measures

The Final EIS includes, in Section 2.2.12, many valuable environmental protection measures that have been committed to by Newfield to reduce the impacts of the proposed project on a variety of resources. We note that the document states that the measures “would apply to all Federal lands within the MBPA [Monument Butte Project Area].” Because the surface jurisdiction in the project area is 87% federal, 11% State of Utah and 2% private, it is unclear why Newfield would employ their ACEPMs only for activities on federal land. Further, the EIS appropriately analyzes the impacts of all development proposed in the project area, regardless of surface jurisdiction, and the analysis does not appear to make a distinction as to application of ACEPMs when discussing impacts of the proposed action. Although requiring implementation of ACEPMs outside of BLM-managed land and/or minerals is not within the BLM’s jurisdiction, we nonetheless recommend confirming with Newfield whether they intend to apply their ACEPMs to all wells within the MBPA. Uniform application of ACEPMs would reduce confusion, ensure consistency with the EIS analysis, and provide consistent environmental protection, which is particularly important for issues such as air quality and water quality where impacts are not limited to the footprint of the development. If the statement in the EIS is not accurate, we recommend that the BLM state in the ROD that ACEPMs would be applied regardless of surface jurisdiction, and include an errata to the Final EIS.

Specific to air quality measures, our understanding based on collaborative efforts with the BLM was that the ozone mitigation strategy would apply throughout the geographically-defined project area. Under the heading of “Annual Emissions Balance Sheet” the Final EIS states “The Project Area shall be defined as the area analyzed in the GMBU FEIS.” However, since this commitment is described as an ACEPM, the conflict with the “all federal lands” statement makes its application confusing. Further, the “Project Area” definition is not included in the other aspects of the ozone mitigation package, including the leak detection and repair program, Ozone Action Mitigation Plan, and air quality ACEPMs. We recommend that the BLM clarify in the ROD and in an errata to the Final EIS that the complete ozone mitigation strategy would be applied by Newfield throughout the MBPA.

Closing

Thank you for your responses to the air and water quality concerns the EPA has identified, and for the opportunity to review and comment on this Final EIS. If you have any questions or would like to discuss our comments, please contact me at 303-312-6704. You may also contact Molly Vaughan, lead reviewer for this project, at 907-271-1215 or by email at vaughan.molly@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "P. S. Strobel", with a long horizontal flourish extending to the right.

Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

